Clean Version of the New Claims

43. (New) A method of speech encoding comprising:

generating a first synthesized speech signal from a first excitation signal;

weighting said first synthesized speech signal using a first error weighting filter to generate a first weighted speech signal;

generating a second synthesized speech signal from a second excitation signal;

weighting said second synthesized speech signal using a second error weighting filter to generate a second weighted speech signal; and

generating an error signal using said first weighted speech signal and said second weighted speech signal;

wherein said first error weighting filter is different from said second error weighting filter.

44. (New) The method of claim 43, wherein said generating said error signal further comprises:

weighting said speech signal using a third error weighting filter to generate a third weighted speech signal; and

subtracting said first weighted speech signal and said second weighted speech signal from said third weighted speech signal to generate said error signal.

45. (New) The method of claim 44, wherein said third error weighting filter is independent from and the same as said first error weighting filter.

46. (New) The method of claim 43, wherein said first excitation signal is from a first codebook and said second excitation signal is from a second codebook, said method further comprising:

using said error signal to independently select a third excitation signal from said first codebook and a fourth excitation signal from said second codebook; and

using said error signal to independently select a third gain to apply to said third excitation signal and a fourth gain to apply to said fourth excitation signal.

47. (New) The method of claim 43, wherein said generating said first synthesized speech signal uses a first synthesizer and said generating said second synthesized speech signal uses a second synthesizer, and wherein said first synthesizer is independent from said second synthesizer.

48. (New) The method of claim 47, wherein said first synthesizer is the same as said second synthesizer.

49. (New) A speech encoder comprising:

a first codebook;

a second codebook;

a speech synthesizer configured to generate a first synthesized speech signal from a first excitation signal of said first codebook and to generate a second synthesized speech signal from a second excitation signal of said second codebook;

a first error weighting filter configured to generate a first weighted speech signal from said first synthesized speech signal;

a second error weighting filter configured to generate a second weighted speech signal from said second synthesized speech signal; and

an error signal generator configured to an error signal using said first weighted speech signal and said second weighted speech signal;

wherein said first error weighting filter is different from said second error

weighting filter.

50. (New) The speech encoder of claim 49, wherein said speech synthesizer includes a

first speech synthesizer for generating said first synthesized speech signal and a second speech

synthesizer for generating said second synthesized speech signal.

51. (New) The speech encoder of claim 49 further comprising a third error weighting

filter to generate a third weighted speech signal from said speech signal, wherein said error signal

generator includes a signal subtractor configured to subtract said first weighted speech signal and

said second weighted speech signal from said third weighted speech signal to generate said error

signal.

52. (New) The speech encoder of claim 51, wherein said third error weighting filter is

independent from and the same as said first error weighting filter.

53. (New) The speech encoder of claim 49, wherein said speech encoder uses said error

signal to independently select a third excitation signal from said first codebook and a fourth

excitation signal from said second codebook, and to independently select a third gain to apply to

said third excitation signal and a fourth gain to apply to said fourth excitation signal.

54. (New) A speech encoder comprising:

means for generating a first synthesized speech signal from a first excitation

signal;

means for weighting said first synthesized speech signal to generate a first

weighted speech signal;

means for generating a second synthesized speech signal from a second excitation

signal;

means for weighting said second synthesized speech signal to generate a second weighted speech signal; and

means for generating an error signal using said first weighted speech signal and said second weighted speech signal;

wherein said means for weighting said first synthesized speech signal is different from said means for weighting said second synthesized speech signal.

55. (New) The speech encoder of claim 54 further comprising:

means for weighting said speech signal to generate a third weighted speech signal; and

means for subtracting said first weighted speech signal and said second weighted speech signal from said third weighted speech signal to generate said error signal.

56. (New) The speech encoder of claim 55, wherein means for weighting said speech signal is independent from and the same as said means for weighting said first synthesized speech signal.

57. (New) The speech encoder of claim 54, wherein said first excitation signal is from a first codebook and said second excitation signal is from a second codebook, said speech encoder further comprising means for using said error signal to independently select a third excitation signal from said first codebook and a fourth excitation signal from said second codebook, and means for using said error signal to independently select a third gain to apply to said third excitation signal and a fourth gain to apply to said fourth excitation signal.

58. (New) The speech encoder of claim 54, wherein said means for generating said first synthesized speech signal is independent from said means for generating said second synthesized speech signal.

59. (New) The speech encoder of claim 58, said means for generating said first synthesized speech signal is the same as said means for generating said second synthesized speech signal.